

The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

**UNITED STATES PATENT AND TRADEMARK OFFICE**

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

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*Ex parte* THOMAS B. HALL and WALTER BURT

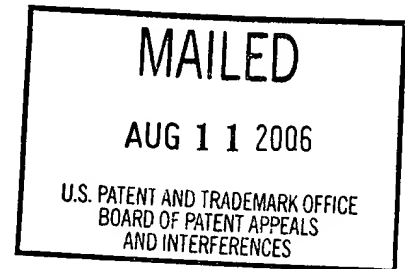
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Appeal No. 2006-0935  
Application No. 09/607,162

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HEARD: July 12, 2006

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Before JERRY SMITH, BARRY, and BLANKENSHIP, *Administrative Patent Judges*.  
BARRY, *Administrative Patent Judge*.

A patent examiner rejected claims 1-20. The appellants appeal therefrom under 35 U.S.C. § 134(a). We affirm-in-part.

**I. BACKGROUND**

The invention at issue on appeal compactly represents interactive, printable music and transmits the compact representation from a server to a client. (Spec., p. 1, ll. 8-11.) Data representing sheet music can be transmitted over the Internet. If all that is transmitted is a graphical representation to be displayed on the screen of a computer, the transmission time of such data is similar to that of standard graphical data. Including interactive capabilities with the graphical representation, however, increases the size of the data and the time of its transmission. (*Id.* at p. 2, ll. 8-14.)

Accordingly, the appellants' invention logically partitions a file into two sets of data. The first set comprises data for displaying sheet music on the screen of a computer including data about bars, notes, and other musical notations. (*Id.* at p. 3, ll. 2-6.)

The second set comprises multimedia data that maps musical notations onto different musical and interactive functions associated with the notations. (*Id.* at ll. 7-8.) The multimedia data include a hierarchical structure of bounding boxes. The boxes delineate graphical areas corresponding to events in a stream of time. For sheet music, the bounding boxes are used to position the musical graphics on the screen to insure that the relevant portions of the music are visible when the music is playing. During playback, the bounding boxes may also be used to locate and highlight individual notes and instruments in the music. (*Id.* at ll. 14-23.)

A further understanding of the invention can be achieved by reading the following claim.

11. A computer implemented method of providing interactive graphics via a computer network, the method comprising:

providing logically separate graphical data and multimedia data sections corresponding to the interactive graphics;

providing a hierarchical set of bounding boxes within the multimedia data section; and

utilizing a hierarchy of bounding boxes to facilitate positioning and zoom of the displayed interactive graphics in response to a user's input.

Claims 1-4, 6, 11, and 12 stand rejected under 35 U.S.C. § 102(e) as anticipated by U.S. Patent No. 5,841,438 ("Cave"). Claims 5, 7-10, and 13-16 stand rejected under 35 U.S.C. § 103(a) as obvious over Cave and U.S. Patent No. 5,690,496 ("Kennedy"). Claims 17-20 stand rejected under § 103(a) as obvious over Cave and U.S. Patent No. 5,889,860 ("Eller").

## II. OPINION

At the outset, we note that the appellants filed a reply brief on June 29, 2004. The reply brief "presents the summary of invention which was omitted from the Appellant's Brief by clerical error." (Reply Br. at 1.) At the time of the reply brief, such a summary was required to include "[a] concise explanation of the invention defined in the claims involved in the appeal, which **shall refer to the specification by page and line number, and to the drawing, if any, by reference characters.**" 37 C.F.R. § 1.192(c)(5)(2003) (emphases added). Of course, "it [was] preferable to read the appealed claims on the specification and any drawing." M.P.E.P. § 1206 (8th ed. Aug. 2001). "[R]eference to page and line number of the specification . . . [was] considered

important to enable the Board to more quickly determine where the claimed subject matter is described in the application." *Id.*

Here, the appellants' *Summary of the Invention*, (Reply Br. at 1-3), refers to neither pages and lines of their specification nor reference characters of their drawings. Nor does their *Summary* read claims on the specification and drawings. The current requirements for a summary of claimed subject matter are set forth in 37 C.F.R. § 41.37(c)(1)(iv). The appellants should ensure that their future briefs satisfy those requirements.

We turn to the arguments section of the appellants' reply brief. "[I]t is inappropriate for appellants to discuss in their reply brief matters not raised in . . . the principal brief[ ]. Reply briefs are to be used to reply to matter raised in the brief of the appellee." *Kaufman Company, Inc. v. Lantech, Inc.*, 807 F.2d 970, 973 n., 1 USPQ2d 1202, 1204 n. (Fed. Cir. 1986). At the time of the appellants' reply brief, the Rules of Practice in Patent Cases provided that "[a]ny arguments or authorities not included in the [original] brief will be refused consideration by the Board of Patent Appeals and Interferences, unless good cause is shown" 37 C.F.R. § 1.192(a) (2003). "Considering an argument advanced for the first time in a reply brief . . . is not only unfair to an appellee . . . but also entails the risk of an improvident or ill-advised opinion

on the legal issues tendered." *McBride v. Merrell Dow and Pharmaceuticals, Inc.*,  
800 F.2d 1208, 1211 (D.C. Cir. 1986) (internal citations omitted).

Here, the appellants chose to argue the patentability of claims 1, 2, 4, 6, 11, and 12 as a group in their original brief. (Appeal Br. at 2-4.) They argued the patentability of claims 5, 7-10, and 13-20 as another group, largely by referencing "the arguments presented by Applicant in support of patentability of Claim 1. . . ." (*Id.* at 6.)

In their reply brief, however, the appellants argued the separate patentability of claims 1, 2, 4-6, 8-13, 15, 16, and 18-20. (Reply Br. at 5-11.) These arguments, which were presented for the first time in the reply brief without showing good cause, are untimely and will not be considered. By not presenting separate arguments thereto in their original brief, the appellants elected to have 1, 2, 4, 6, and 12 stand or fall with claim 11; claims 5, 7-10, 13, 15, and 16 stand or fall with claim 14; and claims 18-20 stand or fall with claim 17. See 37 C.F.R. § 1.192(c)(7) (2003).

Furthermore, the appellants' reply brief presents new arguments regarding claims 7, 14, and 17. (Reply Br. at 8-10.) Because the examiner addressed none of these claims specifically in her examiner's answer, we find nothing therein that would have prompted the arguments. The arguments concerning claims 7, 14, and 17 could

have been made in the appellants' original brief. The term "reply brief" is exactly that, a brief in reply to new rejections or new arguments set forth in an examiner's answer.

The appellants may not present their arguments in a piecemeal fashion, holding back arguments until an examiner answers their original brief. Of course, the appellant is not precluded from presenting new arguments directly to the examiner for consideration as part of a continuing application. With these principles in mind, our opinion addresses the claims in the following order:

- claims 1, 2, 4, 6, 11, and 12
- claim 3
- claims 5, 7-10, and 13-20.

#### A. CLAIMS 1, 2, 4, 6, 11, AND 12

Rather than reiterate the positions of the examiner or the appellants *in toto*, we focus on the following two points of contention therebetween:

- logical separation of data into graphical data and multimedia data
- hierarchical bounding boxes.

##### *1. Logical Separation of Data into Graphical Data and Multimedia Data*

The examiner finds, "Cave . . . teaches (Fig. 2A) representing icons on a playback grid, where the icons represent a corresponding media object (col. 6, ll. 18-25), such that a graphics icon represents a graphic object and a sound icon

represents multimedia data." (Examiner's Answer at 4.) The appellants argue, "examination of FIG. 2A doesn't reveal how it teaches logical separation of data into graphical data and multimedia data." (Appeal Br. at 2.)

"In addressing the point of contention, the Board conducts a two-step analysis. First, we construe the representative claim at issue to determine its scope. Second, we determine whether the construed claim is anticipated." *Ex parte Pittaro*, No. 2005-2057, 2006 WL 1665401, at \*2 (Bd.Pat.App & Int. 2006).

a. Claim Construction

"Analysis begins with a key legal question — *what is the invention claimed?*" *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561, 1567, 1 USPQ2d 1593, 1597 (Fed. Cir. 1987). In answering the question, "the PTO gives claims their 'broadest reasonable interpretation.'" *In re Bigio*, 381 F.3d 1320, 1324, 72 USPQ2d 1209, 1211 (Fed. Cir. 2004) (quoting *In re Hyatt*, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1668 (Fed. Cir. 2000)).

Here, claim 11 recites in pertinent part the following limitations: "providing logically separate graphical data and multimedia data sections corresponding to the interactive graphics. . . ." Giving the representative claim its broadest, reasonable

construction, the limitations require "logical separation of data into graphical data and multimedia data" as observed by the appellants. (Appeal Br. at 2.)

b. Anticipation Determination

"Having construed the claim limitations at issue, we now compare the claims to the prior art to determine if the prior art anticipates those claims." *In re Cruciferous Sprout Litig.*, 301 F.3d 1343, 1349, 64 USPQ2d 1202, 1206 (Fed. Cir. 2002).

"[A]nticipation is a question of fact." *Hyatt*, 211 F.3d at 1371, 54 USPQ2d at 1667 (citing *Bischoff v. Wethered*, 76 U.S. (9 Wall.) 812, 814-15 (1869); *In re Schreiber*, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997)). "A reference anticipates a claim if it discloses the claimed invention 'such that a skilled artisan could take its teachings in combination with his own knowledge of the particular art and be in possession of the invention.'" *In re Graves*, 69 F.3d 1147, 1152, 36 USPQ2d 1697, 1701 (Fed. Cir. 1995) (quoting *In re LeGrice*, 301 F.2d 929, 936, 133 USPQ 365, 372 (CCPA 1962)).

Of course, anticipation "is not an 'ipsissimis verbis' test." *In re Bond*, 910 F.2d 831, 832, 15 USPQ2d 1566, 1567 (Fed. Cir. 1990) (citing *Akzo N.V. v. United States Int'l Trade Comm'n*, 808 F.2d 1471, 1479 & n.11, 1 USPQ2d 1241, 1245 & n.11 (Fed. Cir. 1986)). "An anticipatory reference . . . need not duplicate word for word what is in



the claims." *Standard Havens Prods. v. Gencor Indus.*, 953 F2d 1360, 1369, 21 USPQ2d 1321, 1328 (Fed. Cir. 1991).

Here, Cave discloses "a graphical tool that assists a system designer in scripting the playback of media objects according to constraints of bandwidth." (Col. 1, ll. 16-18.) The reference's "FIG. 2A illustrates an exemplary playback score 201 . . . to orchestrate the playback of media objects." (Col. 5, ll. 33-35.) More specifically, "[s]caled playback grid 203 shows time indexed on the x-axis and a plurality of playback icons 205 disposed down the y-axis. Each playback icon 205 represents a corresponding media object to be played within a time window indicated by the left and right extremities of the icon 205 as located on the x-axis of playback grid 203." (Col. 6, ll. 20-26.)

"[A] multimedia presentation may be orchestrated, including voice, text, graphics, photographs and music, according to a script represented by playback icons 205 deployed on playback grid 203." (*Id.* at ll. 32-36.) Because Figure 2A shows that the multimedia presentation includes graphical data (viz., "GRAPHIC 1" and "GRAPHIC 2") and multimedia data (e.g., "SOUND 1," "MUSIC 1," TEXT 1," and "VIDEO 1"), we agree with the examiner's finding that Cave teaches the logical separation of data into graphical data and multimedia data.

## *2. Hierarchical Bounding Boxes*

The examiner makes the following findings.

Cave also teaches the bounding boxes (i.e. rectangular shaped icons) are scaled on the screen according to the size of the media object (col. 3, ll. 57- 60) and are adaptable in shape in position (col. 4, ll. 3-5), such that the bounding boxes that are selected or manipulated to fill up the pipe of data to be delivered to the display is viewed during runtime/display of the playback score. Thus, Cave's hierarchical bounding boxes directly correspond to that of the Applicant's as the Applicant's specification (pp. [sic, p.] 10) indicates that the hierarchy of bounding boxes identifies areas of interest in a time stream, such that the focus/zoom and the synchronization of these areas of interest to time-ordered events is controlled by the bounding boxes.

(Examiner's Answer at 6.) The appellants argue, "The hierarchical structure of the bounding boxes lies in their ranking between level 1 and level 6, not in when a particular area of a musical score corresponding to a bounding box is displayed to a user. Therefore, Cave shows no hierarchical structure. . . ." (Appeal Br. at 4-5.)

### *a. Claim Construction*

Claim 11 further recites in pertinent part the following limitations: "providing a hierarchical set of bounding boxes within the multimedia data section. . . ." The appellants assert, "The dictionary definition of the word 'hierarchy' in the Merriam-Webster dictionary online is given as 'a graded or ranked series'. . . ." (Appeal Br. at 4.) Giving the representative claim its broadest, reasonable construction, the limitations require a graded or ranked series of boxes for bounding something.

b. Anticipation Determination

As aforementioned, each of Cave's playback icons 205 represents a corresponding media object to be played. Figure 2A of the reference, moreover, shows that each playback icon comprises a rectangle, the left and right extremities of which demarcates the time that the corresponding media object is to be played. Because each playback icon bounds the time that the corresponding media object is to be played, we find that the icons constitute bounding boxes. Cave explains that the playback icons represent "a **series** of media objects. . . ." (Abs., ll. 5-6 (emphasis added).) Figure 2A also shows that the playback icons vary in length depending on the time that the corresponding media object is to be played. Because the playback icons vary in size from smallest to largest, we further find that the icons constitute a graded or ranked series of boxes for bounding.

Furthermore, Cave's "FIG. 2C illustrates download score 251 corresponding to the exemplary playback score illustrated in FIG. 2A. . . ." (Col. 5, ll. 38-39.) More specifically, the former Figure "shows download icons 257 deployed by the system on download grid 253. The system creates a download icon 257 for each playback icon 205 placed on playback score 201 by the system designer (as illustrated in FIG. 2A) in orchestrating a multimedia presentation. The systems [sic] first identifies and fixes the topographical area of each download icon 257 in view of the x- and

y-scales selected for download grid 253. The system accomplishes this by analyzing each media object's data size, and then determining and assigning the topographical area corresponding to that data size on the currently selected x- and y-scales of grid 253." (Col. 7, ll. 29-39.)

"The system then deploys download icons 257 on download grid 253 according to default rules. In a preferred embodiment, download icons 257 are deployed as rectangles having the pre-assigned topographical area." (*Id.* at ll. 40-43.) Figure 2C shows different elements (e.g., "GRAPHIC 1," "SOUND 1," "MUSIC 1," and "TEXT 1,") of the multimedia presentation are bounded by each of the rectangles. Consequently, we find that the reference's download icons constitute bounding boxes. The same Figure also shows that the download icons vary in area depending on the data size of the media object that each represents. Because the download icons vary in size from smallest to largest, we further find that the reference's download icons also constitute a graded or ranked series of boxes for bounding.

The appellants argue "that the coined term 'bounding box' describes an object invisible (not displayed) to a user. Contrary to the meaning of that coined term, Cave discloses a visual aid, an icon, for bandwidth allocation." (Appeal Br. at 4.) Of course, "limitations are not to be read into the claims from the specification." *In re Van Geuns*,

988 F.2d 1181, 1184, 26 USPQ2d 1057, 1059 (Fed. Cir. 1993) (citing *In re Zletz*, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989)). Because claim 11 omits the feature of invisibility, the argument based thereon is unpersuasive.

Alternatively, Cave's "FIG. 2B illustrates a runtime view 231 corresponding to playback score 201 on FIG. 2A," (col. 6, ll. 37-38), to which the download score of Figure 2C also corresponds as aforementioned. "The system designer switches to runtime view 231 to see and hear the multimedia presentation orchestrated on playback score 201." (*Id.* at ll. 38-40.) Figure 2B shows that while the presentation is playing, the reference's playback icons and download icons are not displayed, i.e., are invisible, to the designer. Therefore, we affirm the rejection of claim 11 and of claims 1, 2, 4, 6, and 12, which fall therewith.

#### B. CLAIM 3

The examiner finds, "Cave teaches the playback of a series of media objects on a playback score analogous to a musical score (abstract)." (Examiner's Answer at 6.) The appellants argue, "Cave icons represent visual bandwidth allocation for different objects, they do not represent a musical score of a musical piece with notes and staves and clefs." (Appeal Br. at 5.)

### *1. Claim Construction*

Claim 3 recites in pertinent part the following limitations: "the hierarchical structure of bounding boxes is defined for a musical score." Accordingly, the claim requires using the hierarchical bounding boxes to define an actual musical score.

### *2. Anticipation Determination*

"[A]bsence from the reference of any claimed element negates anticipation." *Kloster Speedsteel AB v. Crucible, Inc.*, 793 F.2d 1565, 1571, 230 USPQ 81, 84 (Fed. Cir. 1986). Here, it is uncontested that Cave teaches a playback score instead of a musical score. The analogousness of the playback score to a musical score, moreover, does not anticipate the latter. Therefore, we reverse the rejection of claim 3.

### C. CLAIMS 5, 7-10, 13-20

The appellants repeat their argument that "Cave doesn't disclose hierarchical structure of bounding boxes, as well as logical separation of the data into a graphical and multimedia data subsets. . . ." (Appeal Br. at 6.) As explained regarding claim 11, however, we are unpersuaded by these arguments.

For her part, the examiner finds, "It would have been obvious to one of ordinary skill in the art to [have] combine[d] the server disclosed by Kennedy with the disclosure

of Cave because Cave teaches storing files on multiple devices for delivery and storing files on a hard drive enables shared access over a network." (Final Rej. at 5.) She similarly finds, "It would have been obvious to one of ordinary skill in the art to [have] include[d] the server disclosed by Eller with the disclosure of Cave because Cave teaches storing files on multiple devices for delivery and storing files on a hard drive enables shared access over a network." (*Id.* at 8.) The appellants allege, "Nor is there any motivation to combine with a reasonable expectation of success." (Appeal Br. at 6.)

"The presence or absence of a motivation to combine references in an obviousness determination is a pure question of fact." *In re Gartside*, 203 F.3d 1305, 1316, 53 USPQ2d 1769, 1776 (Fed. Cir. 2000) (citing *In re Dembiczak*, 175 F.3d 994, 1000, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999)). A suggestion to combine teachings from the prior art "may be found in explicit or implicit teachings within the references themselves, from the ordinary knowledge of those skilled in the art, or from the nature of the problem to be solved." *WMS Gaming Inc. v. Int'l Game Tech.*, 184 F.3d 1339, 1355, 51 USPQ2d 1385, 1397 (Fed. Cir. 1999) (citing *In re Rouffet*, 149 F.3d 1350, 1355, 47 USPQ2d 1453, 1456 (Fed. Cir. 1998)). Furthermore, "argument of counsel cannot take the place of evidence." *In re Budnick*, 537 F.2d 535, 538, 190 USPQ 422,

Here, those skilled in the art would have known that storing files on a hard drive that is connected to a network would have enabled access to the files via the network. For their part, the appellants do not address specifically, let alone show error in, this reason for combining teachings from Cave, Kennedy, and Eller. Nor do the appellants explain, let alone show evidence, that those skilled in the art would not have reasonably expected such combinations to have been successful. Therefore, we affirm the rejection of claims 5, 7-10, 13-20.

### III. CONCLUSION

In summary, the rejection of claims 1, 2, 4, 6, 11, and 12 under § 102(e) is affirmed. The rejection of claim 3 under § 102(e), however, is reversed. The rejections of claims 5, 7-10, 13-20 under § 103(a) are affirmed.



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